

GORINSHTEYN, L.L., kand. tekhn. nauk; ZAV'YALOV, V.A., kand. tekhn. nauk;  
NEMOLVIN, N.S., inzh.; TALDYKIN, B.S.

Complex improvements and automatic control of technological operations  
at the peat-briquet plant. Torf. prom. 36 no.7:11-16 '59.  
(MIRA 13:3)

- 1.Kalininskiy torfyanoy institut (for Gorinshteyn, Zav'yaylov).
- 2.Tatishchevskoye torfopredpriyatiye (for Nemolvin, Taldykin).  
(Peat industry--Equipment and supplies) (Briquets (Fuel))

UNIVERSITY, London [Namorarius, J.]; SHREYDER, S.N. [translator] [deceased];  
VESELOVSKII, L.N. [red.]

Given numbers. Ist.-mat. issl. no.12:559-654 '59. (MIRA 13:11)  
(Mathematics)

14/10-14/20

AUTHOR: Borisov, N.D., Nemoshkalenko, V.V., Fefer, A.M. 48-10- 14/20

TITLE: X-Ray Spectral Method of Investigating Electron Distribution  
According to States in Metals and Alloys (Rentgenospektral'nyy  
metod issledovaniya raspredeleniya elektronov po sostoyaniyam v  
metallakh i splavakh)

PERIODICAL: Izvestiya AN SSSR Seriya Fizicheskaya, 1957, Vol. 21, Nr 10,  
pp. 1424-1434 (USSR)

ABSTRACT: On a powerful spectrograph with a crystal-bending radius of 500 mm  
and a tube for the recording of X-ray spectra of samples subjected  
to high temperatures, it was possible, by the method of primary exci-  
tation, at 1000° and with an oscillating crystal, to obtain emission  
lines of the K $\beta$ -group of pure chromium and iron as well as of Fe-Cr  
alloys with 4, 5, 8, 20, 30, 45, 50 and 75% chromium content. It is  
shown that the transition of chromium and iron to the Fe-Cr alloy in  
the alloy-component-concentration domain under investigation as well  
as the transition of the  $\gamma$ -composition along the axis into an  $\alpha$ -solid  
solution exercises no influence (within the limits of measuring er-  
rors) upon the position of the maxima of FeK $\beta_1$ -, FeK $\beta_5$ - and CrK $\beta_1$ -  
lines. It is shown that the CrK $\beta_5$ -band maximum is shifted in the di-  
rection of the longwave side with an increase of iron concentration.

Card 1/3

48-10-14/20

X-Ray Spectral Method of Investigating Electron Distribution According to States  
in Metals and Alloys

whereas the shortwave edge of the  $\text{CrK}\alpha_5$ -band is shifted in the direction of the shortwave side with an increase of iron concentration and attains the lowest values within the central domain of the component concentration of iron-chromium alloys. It is further shown that the conductivity width of band and the number "n" of the "exterior" electrons differ per atom in the case of all alloy components with the exception, as it seems, of two, i.e. chromium and iron. In the central domain of concentration of chromium-iron alloy components they attain their minimum value in iron and their maximum value in chromium. Modifications of the width of the  $\text{K}\beta_5$ -band of chromium and iron, as well as the position of the shortwave edge of the chromium band points in the direction of a complicated modification of the electron structure of chromium- and iron atoms in Fe-Cr alloys with the component-concentration modification of Fe-Cr alloys. It is shown that the transition of the  $\gamma$ -composition along the axis into an  $\alpha$ -solid solution is characterized in iron by a considerable modification of the course of  $T_{\max}$  (kinetic electron energy in the

Card 2/3

X-Ray Spectral Method of Investigating Electron Distribution According to States  
in Metals and Alloys 48-10-14/20

conductivity band) - component concentration of the Fe-Cr alloys-  
curve. There are 6 figures, 5 tables, and 10 references, 8 of which  
are Slavic.

ASSOCIATION: Institute for Metal Physics AS Ukrainian SSR (Institut metallo-  
fiziki Akademii nauk SSSR)

AVAILABLE: Library of Congress

Card 3/3

BORISOV, N.D.; VENOSHKALEMENKO, V.V.; FEFER, A.M.

Effect of the concentration of components in iron-chromium alloys  
on structure of the energy spectrum of chromium and iron conduction  
zones at high temperatures. Issl. po sharopr. splav. 3:252-263  
'58.

(Iron-chromium alloys--Metallography) (MIRA 11:11)  
(Electron diffraction examination) (Metals at high temperature)

BORISOV, N.D.; NEMOSHKALENKO, V.V.; SVIRSKIY, G.S.

X-ray tube for obtaining fluorescence spectra at a wide range of  
temperatures. Zav. lab. 24 no. 5:639-640 '58. (MIRA 11:6)

1. Institut metallofiziki Akademii nauk Ukrainskoy SSR.  
(X-ray spectroscopy)

AUTFORS:

Borisov, N. D., Nemoshkalenko, V. V.,  
Fefer, A. M.

SDV/20-121-2-19/53

TITLE:

The Structure of the Energy Spectrum of Electrons in Iron-Chromium Alloys (Struktura energeticheskogo spektra elektronov v zhelezo-khromistykh splavakh)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 2,  
pp. 264 - 267 (USSR)

ABSTRACT:

The  $\alpha \rightarrow \sigma$  phase transformation of Fe-Cr alloys is of high interest because of the changed structure of the crystal lattice and the modification of different physical properties occurring in connection with it. These modifications are connected with modified energetical conditions of the atom electrons of the alloy component. The investigation of the modification of the fine structure of X-ray spectral lines - caused by transitions of electrons from exterior energetic bands to the K-level - offers an insight into the character of the  $\sigma$ -phase, the mechanism of the  $\alpha \rightarrow \sigma$  phase transition and into the physical properties. In the present paper investigations of  $K_{\beta_5}$  X-ray emission bands of chromium and iron in Cr-Fe

Card 1/3

The Structure of the Energy Spectrum of Electrons in  
Iron-Chromium Alloys

SOV/20-121-2-19/53

alloys are described. Similar investigations, namely of K-absorption spectra of the K-group of chromium and iron of a Fe-Cr alloy with 52,38% of iron were carried out by Kazantsev (Refs 1,2), yet the weak linear dispersion of the spectrograph applied did not permit a clear interpretation of the results. The authors of the present paper investigated Fe-Cr alloys with 35,40 and 55 % by weight of chromium; very pure Cr and Fe was obtained by electrolytical methods, the alloy was homogeneously tempered in a vacuum high-frequency furnace at 1150° for 30 hours. The transformation of the alloy from the α- into the σ-phase took place during the isothermal annealing at 650° in the course of 150 hours. The procedure adopted in the experiments was described in a previous paper (Ref 3) and is not repeated here. The results for pure Fe, pure Cr and 10 Fe-Cr alloys of different composition are given in a table. There are 2 figures, 2 tables, and 3 references, which are Soviet.

Card 2/3

The Structure of the Energy Spectrum of Electrons in Iron-Chromium Alloys SOV/20-121-2-19/53

ASSOCIATION: Institut metallofiziki Akademii nauk SSSR (Institute of Metal Physics of the AS USSR)

PRESENTED: February 11, 1958, by G.V.Kurdyumov, Member, Academy of Sciences, USSR

SUBMITTED: February 4, 1958

Card 3/3

AUTHORS: Borisov, N.D. and Nemoshkalenko, V.V. SOV/126-8-2-9/26  
TITLE: The Structure of the Electron Energy Spectrum of Fe-Cr,  
Fe-Cr-Ni Alloys  
PERIODICAL: Fizika metallov i metallovedeniye, 1959, Vol 8, Nr 2,  
pp 211 - 215 (USSR)  
ABSTRACT: The aim of the present work was to establish characteristic  
changes in the structure of the electron energy spectrum  
due to the addition of nickel and iron-chromium alloys.  
The following alloys were used: Fe-Cr (55% Fe),  
Fe-Cr-Ni (58.4% Fe and 15.4% Ni). The nickel was electro-  
lytically pure and the other components were of a "high  
degree of purity". The investigation was carried out with  
the aid of a quartz crystal ( $R = 50$  cm) X-ray spectro-  
graph (compare Ref 1)  $K_{\beta_5}$  lines of Cr, Fe and Ni (due to  
transitions from the conduction band of the K-level)  
together with the shortwave  $K_{\beta''}$  satellite, and  
 $K_{\beta_1}$  lines (due to the transitions from the 3p-shell)

Card 1/3

The Structure of the Electron Energy Spectrum of Fe-Cr, Fe-Cr-Ni  
Alloys S0V/126-8-2-9/26

of the K levels) together with the long wave  $K_{\beta}$ , satellite were investigated. These lines were obtained at 1 000°C for the elements taken separately of the above alloys. The  $K_{\beta}$  lines for Fe and Ni were recorded in the fourth order and the Cr lines in the third order. The corresponding dispersion was 3.88 Å/mm (Cr), 2.44 Å/mm (Fe) and 3.03 Å/mm (Ni). The results obtained are shown in Tables 1 and 2. It was found that the width of  $CrK_{\beta_5}$  obtained for pure chromium increased with

temperature. In the magnetic transition region there was a sharp increase in the width of  $FeK_{\beta_5}$  (to 0.9 + 0.1 eV).

The position of  $FeK_{\beta_5}$  remains unaltered. The  $\alpha \rightarrow \gamma$  phase transformation is accompanied by a small change in the Fermi energy. The Fermi energy for the Fe-Cr alloy is 0.19 v/R and 0.22 v/R for the Fe-Cr-Ni alloy.

Card 2/3

SOV/126-8-2-9/26

The Structure of the Electron Energy Spectrum of Fe-Cr, Fe-Cr-Ni Alloys

Alloying of chromium, nickel and iron results in sharp changes in the position of the  $K_{\beta}'''$  satellites of chromium iron and nickel and a rapid change in the  $K_{\beta_5}$  and  $K_{\beta_1}'''$  intensity ratios. The position of the maximum  $K_{\beta_1}$  remains unaltered in all cases.

There are 3 figures, 3 tables and 2 Soviet references.

ASSOCIATION: Institut metallofiziki AN USSR (Institute of Metal Physics of the Ac.Sc., Ukrainian SSR)

SUBMITTED: March 6. 1958

Card 3/3

BORISOV, N.D.; NEMOSHKALENKO, V.V.; FEYER, A.M.

Structure of the energy spectrum of chromium and iron electrons  
in iron-chromium alloys. Issl.po zharopr.splav. 4:78-89 '59.  
(MIRA 13:5)  
(Electrons--Spectra) (Iron-chromium alloys)

SOV/48-23-5-8/31

24(7)

AUTHORS:

Borisov, N. D., Nemoshkalenko, V. V., Fefer, A. M.

TITLE:

Structure of the Energy Spectrum of Electrons in Iron - Chromium Alloys (Struktura energeticheskogo spektra elektronov v zhelezo-khromistykh splavakh)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959,  
Vol 23, Nr 5, pp 573 - 577 (USSR)

ABSTRACT:

Great interest is displayed for the phase transformation  $\alpha \rightarrow \gamma$  of the alloys of the system Fe-Cr, since a fundamental change in the structure of the crystal lattice and the physical properties take place along with this transformation. The authors assume these transformations to be related to a change of the energy state of the electrons of the atoms in individual alloy components. Investigations of the changes of the X-ray spectral lines, especially the transition of electrons from the outer energy field to the K-level, are to supply the fundaments for the understanding of the mechanism of phase transformation and of the changes in physical properties. Mention is made of investigations carried out by Kazantsev (Refs 1 and 2), which were not altogether successful

Card 1/2

Structure of the Energy Spectrum of Electrons in  
Iron - Chromium Alloys

SOV/48-23-5-8/31

because of unsuitable experimental arrangements. The preparation of samples and their treatment are described, and the K-lines of pure iron and pure chromium, taken in two microphotographs at 1000°C, are shown. The computed values of the width of the K-band of chromium and iron in various alloy compositions at a temperature of 1000°C are shown in table 2, and the computed values of the Fermi energies and of the energies of the 3d band are given, taking into account the  $\alpha$ ,  $\sigma$  and  $\gamma$  phases. Both tables are discussed in detail, and a diagram (Fig 3) is plotted with the respective data, depicting the superimpositions of the energy fields of chromium and iron in Fe-Cr alloys. It is shown in this connection that in the mean range of the concentration of both components the energy of the 3d band of iron exhibits a minimum, and that of chromium a maximum. There are 3 figures, 4 tables, and 3 Soviet references.

ASSOCIATION: Rentgeno-spektral'naya laboratoriya Instituta metallofiziki Akademii nauk USSR (X-ray Spectral Laboratory of the Institute of Metal Physics of the Academy of Sciences, UkrSSR)

Card 2/2

BORISOV, N.D.; NEPOSINKALENO, V.V.; FEFER, A.M.

Effect of nickel concentration on the structure of the energy spectrum  
of chromium and iron electrons. Issl. po zharopr. splav. 6:130-135  
'60. (MIRA 13:9)  
(Iron-chromium-nickel alloys--Spectra) (Electrons)

BORISOV, N.D.; NEMOSHAKALENKO, V.V.

Determining the energy of X-ray photons and the electron energy levels  
within atoms. Stor. nauch. rab. Inst. metallofiz. AM URSR no.11:129-  
132 '60. (MIRA 13:11)

(Protons) (Electrons) (X-ray spectroscopy)

80895

S/048/60/024/04/05/009  
B006/B017

246200

AUTHORS: Borisev, N. D., Nemoshkalenko, V. V.

TITLE: On the Problem of Determining the Energy of X-Ray  
Photons and the Energy of Atomic Electron Levels 1/PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960,  
Vol. 24, No. 4, pp. 393-396

TEXT: The present article is a reproduction of a lecture delivered at the 4th All-Union Conference on X-Ray Spectroscopy (Rostov-na-Donu, June 29 - July 6, 1959). Above all, the authors point out that a number of tables on X-ray spectra available at present are incorrect because they do not take into account the relation  $\lambda_{KX} = 1.00203 \text{ \AA}$  (e.g., Refs. 2-6) although they have been issued after 1947. The deviations they by some examples. The table on p. 393 contains the  $\lambda$ -values in X-units for the  $K\alpha_1$  lines of some elements, the tabulated energy values in rydbergs, and the energy values computed from the formula  $E = 1/\lambda R$  ( $R$  = Rydberg constant). In determining the photon energy an error occurs  $\{\Delta E\}$ , which is the higher the higher the photon energy  $E$ . The correct ✓

Card 1/2

80895

On the Problem of Determining the Energy of X-Ray S/048/60/024/04/05/009  
Photons and the Energy of Atomic Electron Levels B006/B017

formula for computing these energies is  $\log E(\text{Ry}) = 5.9587650 - \log \lambda$  (X-units). In the following, details are chosen from some papers mentioned - e.g., details on the K-level of copper (Refs. 4, 8) - and it is demonstrated that the deviations may be partly very high. The conclusions to be drawn from the investigations of the authors are summarized as follows: 1) The data on X-ray photons and spectral absorption edges given in the tables available at present should be revised with special regard to the most recent data on physical constants. 2) It was found necessary to recalculate the electron level terms, using the state of the neutral atom as zero point of the energy scale. 3) It is necessary for X-ray spectroscopy to set up new tables which take into account the facts discussed by the authors. There are 1 table and 14 references: 7 Soviet, 3 American, 1 British, 1 Czech, 1 German, and 1 Swedish.

ASSOCIATION: Institut metallofiziki Akademii nauk USSR (Institute of Metal Physics of the Academy of Sciences of the UkrSSR)

Card 2/2

BORISOV, N.D.; NEMOSHKALENKO, V.V.

Resolving power of a single crystal spectrograph of our design  
with focusing according to Johann. Sbor. nauch. rab. Inst.  
metallofiz. AN URSR no.13:181-185 '61. (MIRA 14:12)  
(Spectrograph)

BORISOV, N.D.; NEMOSHKALENKO, V.V.

Resolving power of single-crystal spectrographs with Johann focusing. Izv. AN SSSR. Ser. fiz. 25 no.8:943-946 Ag '61.  
(MIRA 14:8)

1. Institut metallofiziki AN USSR.  
(X-ray spectroscopy)

BORISOV, N.D.; NEMOSHKALENKO, V.V.

Electron distribution by states in metals of the iron transition group. Izv. AN SSSR. Ser. fiz. 26 no.8:1002-1006 Ag '61.

(MIRA 14:8)

1. Institut metallofiziki AN USSR.  
(Electrons)  
(Metals)

BORISOV, N.D.; NEMOSHAKALENKO, V.V.; FEFER, A.M.

Effect of temperature and small concentrations of impurities  
(Ti, Fe, Ni, Hf, Ta) on the fine structure of the X-ray band  
in chromium. Issl.po zhарopr.splav. 8:14-19 '62.

(MIRA 16:6)

(Chromium--Metallography)  
(Metals, Effect of temperature of)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001136520020-1

BORISOV, N.D.; NEMOSHKALENKO, V.V.

Efficiency of the resolving power of X-ray spectra investigating  
methods. Sbor. nauch. rab. Inst.metallofiz. AN URSR no.16:186-189  
'62. (X-ray spectroscopy) (MIRA 16:5)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001136520020-1"

S/020/62/143/006/012/024  
B164/B101

AUTHOR:

Nemoshkalenko, V.

TITLE:

Structure of the energy spectrum of electrons in  
ferro-cobalt alloys

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 6, 1962,  
1328-1331

TEXT: In order to determine the number of 3-d electrons for atoms in the iron group, the author studied the characteristic changes that occur in the energy spectrum of electrons of Fe-Co alloys when the Co concentration is changed in  $\alpha \rightarrow \gamma$  phase transitions and in transitions above the Curie point. The resulting change in electron structure affects the X-ray emission band parameters. The integral band intensity was measured by a photographic method already described by the author (Izv. AN SSSR, ser. fiz., 25, no. 8 (1961)). The K<sub>β</sub>-lines for Fe and Co were examined in the temperature range 250-1250°C, and for Fe-Co alloys in the range 550-1200°C. Results: (1) In the case of Fe, no change occurs in the

Card 1/3

S/020/62/143/006/012/024  
B164/B101

Structure of the energy spectrum ...

integral intensity during the  $\alpha \rightarrow \gamma$  transition or on passing the Curie point. The first result indicates that no change in electron structure attends the  $\alpha \rightarrow \gamma$  transition. The second result might be explained either by d-s electron transitions or by a change in transition probability.

(2) For Fe-Co alloys, a change in the integral intensity of the  $FeK_{1,5}$  and  $CoK_{1,5}$  bands for alloys containing 40% of Co is observed at high

temperatures, indicating differences in the electron structure of alloys with a higher and lower Co content. This is consistent with the photon-energy values. (3) These values point to two effects: (a) an aggregate displacement of the maximum energies for  $FeK_{1,5}$  and  $CoK_{1,5}$

attendant upon changes in concentration of the components and due to phase and magnetic transitions; (b) a displacement of the maximum of the  $K_{3,1}$  line depending on the concentration of alloy components. There

are 2 figures and 3 tables. The two most important English-language references are: N. F. Mott, K. W. H. Stevens, Phil. Mag., 2, no. 23 (1957); R. J. Weiss, J. J. De Marco, Phys. Rev., Letters, 2, no. 4,

Card 2/3

Structure of the energy spectrum ...

S/020/62/143/006/012/024  
B164/B101

148 (1959).

ASSOCIATION: Institut metallofiziki Akademii nauk USSR (Institute of the Physics of Metals of the Academy of Sciences UkrSSR)

PRESNTED: November 17, 1961, by G. V. Kurdyumov, Academician

SUBMITTED: November 14, 1961

Card 3/3

NEMOSHAKALENKO, V.V.

Taking into account the intensity of  $K\beta$ -satellites in studying  
 $K\beta_5$ -lines of elements in the transition group of iron. Sbor.  
nauch. rab. Inst. metallofiz. AN USR no.17:64-67 '63. (MIRA 17:3)

s/020/63/148/001/015/032  
B104/B186

AUTHOR:

Nemoshkalenko, V. V.

TITLE:

An X-ray spectral examination of the iron transition group of metals

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 1, 1963, 78-81

TEXT: The K-series of the electron structure of titanium, vanadium, chromium, manganese, iron, cobalt and copper were examined. A (1340) quartz crystal analyzer with a resolution of 40,000 was used. A (1340) short-wave branch of the K $\beta$ 5 bands with a resolution of 25,000. Since the any K $\beta$  satellites, their line width and integral intensities can be measured easily. The intensity of the K $\beta$ 5 satellite of Mn is low, but that of iron and copper is high. The K $\beta$ 5 band of nickel has three satellites, that of copper has two, thus considerably impairing the

Card 1/3

S/020/63/148/001/015/032

B104/B186

An X-ray spectral examination of the ...

precision of the measurements. In general, the values for the intensities of the satellites are higher than those given in publications (Table 2). The dependence of the integral intensity of the  $K_{\beta 5}$  band on the atomic number shows that with increasing Z the electron structure undergoes a considerable change which is accompanied by a redistribution of the electron states, leading to a change in the transition probabilities. When iron, cobalt or nickel pass into the paramagnetic state their  $K_{\beta 5}$  bands broaden by about 0.4 ev and the maximum shifts about 0.3 ev toward lower energies. The relatively high asymmetry indices of the  $K_{\alpha 1}$  and  $K_{\alpha 2}$  lines of V, Fe, Co, Ni and Cu (between 1.0 ( $\beta K_{\alpha 2}$ , V) and 1.5 ( $\beta K_{\alpha 1}$ , Fe)) are attributed to exchange interaction between the 3d electrons and inner 2p electrons. This type of interaction splits the 2p levels into two closely adjacent sublevels. There are 2 figures and 4 tables.

ASSOCIATION: Institut metallofiziki Akademii nauk USSR (Institute of Physics of Metals of the Academy of Sciences UkrSSR)

Card 2/3

An X-ray spectral examination of the ...

S/020/63/148/001/015/032  
B104/B186

PRESENTED: June 25, 1961, by G. V. Kurdyumov, Academician

SUBMITTED: June 25, 1961

ELEMENT	$I_{\text{int}}K_{\beta''}/I_{\text{int}}K_{\beta_1}$	$I_{\text{int}}K_{\beta'''}/I_{\text{int}}K_{\beta_1}$	$I_{\text{int}}K_{\beta_2}/I_{\text{int}}K_{\beta_1}$	$I_{\text{int}}K_{\beta_3}/I_{\text{int}}K_{\beta_1}$
Tl	0,0032	0,0037	0,0170	0,0177
V	0,0055	0,0074	0,0229	0,0221
Cr	0,0035	0,0041	0,0270	0,0261
Fe	0,0041	0,0122	0,0143	0,0123
Co	0,0044	0,0109	0,0122	0,0084

Table 2. Integral and maximum intensities of the  $K_{\beta_5}$  band and of the  $K_{\beta''}$  satellites.

Card 3/3

BORISOV, N.D.; NEMOSHKALMIKO, V.V.

X-ray investigation of the electron structure of alloys in  
the system titanium-hromium. Sber. nauk. rab. Inst. me-  
tallifiz. AN URSR no. 18202-203 194 (MIRA 17:8)

L 21739-66  
ACC NR: AF6008045

EVT(1)/EVT(m)/EVP(t)

IJP(c) JD/JG/AT

SOURCE CODE: UR/0020/66/166/004/0847/0850

AUTHOR: Magornyy, V. Ya.; Nemoshkalenko, V. V.

ORG: Institute of Physics of Metals, Academy of Sciences UkrSSR (Institut metallo-fiziki Akademii nauk UkrSSR)

TITLE: Structure of the energy spectrum of electrons in iron-vanadium alloys

SOURCE: AN SSSR. Doklady, v. 166, no. 4, 1966, 847-850

TOPIC TAGS: iron, vanadium, electron spectrum, iron alloy, vanadium alloy, energy structure

ABSTRACT: The authors study the characteristic changes in the structure of the energy spectrum of electrons in pure iron and vanadium which take place during the formation of alloys with various concentrations of components. The DRS-2 spectrograph is used with a resolution of 32,200 for vanadium and 21,000 for iron. The specimens studied were pure iron, vanadium and alloys containing 47.71 and 78.49 wt % V. The 47.71% alloy was in the  $\alpha$ -phase. The shape, width, wavelength position of maxima, relative maximum intensities and integral intensities of  $K_{2,3}$ -bands were

UDC: 537.531 : 535.3

Card 1/3

L 21739-66  
ACC NR: AP6008045

studied as well as a number of parameters of  $K_{\beta 1}$ -lines produced by vanadium and iron atoms. Curves for the distribution of intensity in the  $K_{\beta 5}$ -band for pure iron and vanadium show two clearly defined maxima. This type of distribution is similar to the theoretical form of the conduction band for elements in the iron transition group. The two-peak structure is due to the existence of two "types" of d-electrons which differ considerably in the radial distribution of density of states. A table is given showing the energy positions of the fundamental maxima in the  $K_{\beta 5}$ -bands for the pure elements and for the alloys studied. A transition from the pure element to an alloy containing 47.7% V causes a shift in the maximum of the  $K_{\beta 5}$ -band for vanadium toward longer wavelengths by 0.2 ev, and in the  $K_{\beta 5}$ -band for iron toward the shorter wavelengths by 0.1 ev. Since measurement accuracy is only  $\pm 0.1$  ev, these data indicate only a tendency for a shift in the fundamental maximum which may be due to redistribution of electrons in the outer bands of the components during formation of the alloy--a reduction in the number of electrons for atoms of iron and an increase in vanadium. An increase is observed in the maximum intensity of the  $K_{\beta 5}$ -band for iron which agrees satisfactorily with the corresponding reduc-

Card 2/8

L 21739-66  
ACC NR: AP6008045

tion in its width and its constant relative integral intensity. Vanadium shows a reduction in the relative maximum intensity of the K<sub>β5</sub>-band which agrees well with the increase in its width and the reduction in relative integral intensity in the alloy. Orig. art. has: 2 figures, 3 tables.

SUB CODE: 20, 11/ SUBM DATE: 02Jun65/ ORIG REF: 006/ OTH REF: 002

Card 3/3 R

NEGOV, A.P.

YERMAKOV, V.S.; KLOCHKOV, I.M.; CHIZHOV, D.G.; KOGTEV, G.I.; LAVRENNIKOV, K.D.; NEGRASOV, A.M.; SPIRIN, S.A.; VENZLOV, N.D.; KOTILEVSKIY, D.O.; SHIROKOV, O.V.; MARINOV, A.M.; MALSIMOV, A.A.; IVANOV, N.I.; NIKOV, A.P.; CHUPRAKOV, N.M.; AVTONOMOV, B.V.; SYROMYATNIKOV, I.A.; MOLODENOV, S.T.; PARFENOV, S.TS.; GORSHKOV, A.S.; GOL'DENBERG, P.S.; SOKOLOV, B.M.; MAKUSHKIN, Ya.G.; MINITARYAN, S.G.; RASSADNIKOV, Ye.I.; GHUDIISKIY, P.G.; PONICHEV, G.I.; SHCHERBININ, B.V.; ZAITSEV, V.I.; KOKOREV, S.V.; KLYUZHIN, M.P.; PESCHANSKIY, V.I.; SAFRAZBEEVAN, G.S.; i dr...

IUrii Prokhorovich Komissarov; obituary. Elek.sta. 25 no.5:60 My '54.  
(Komissarov, IUrii Prokhorovich, 1910-1954) (MLRA 7:6)

AID F - 381

Subject : USSR/Power Eng.  
Card 1/2 Pub. 110-a - 2/17  
Authors : Nemov, A. P. and Ostrovskiy, Ya. M., Engs, Main Central Power System and Moscow Power System  
Title : Some results of the operation of turbine equipment with super-high characteristics  
Periodical : Teploenergetika, 11, 6-16, 1955  
Abstract : The authors describe in detail the 18 months operation of two 150,000 kw, 3,000 rpm, 170 atm, 550°C turbines of the SVK-150-1 type, manufactured by the Leningrad Metal Plant. The design defects and changes made during the operation are explained. Tables and curves show temperature and time data. The work of feeders and steam conduits is discussed in detail. The necessity for further improvement of the unit design is emphasized. Nine diagrams and photos.

AID P - 3881

Teploenergetika, 11, 6-16, N 1955

Card 2/2 Pub. 110-a - 2/17

Institution : None

Submitted : No date

AID P - 2760

Subject : USSR/Engineering  
Card 1/1 Pub. 110-a - 2/14  
Authors : Nemov, A. P. and Ostrovskiy, Ya. M. Engs.  
Title : Some results of operation of super-high pressure  
boilers  
Periodical : Teploenerg, 9, 8-18, S 1955  
Abstract : The installation and operation of 90 atm, 5000 C  
boilers manufactured at the Taganrog Boiler Plant  
is reported. Details of the boiler design, the  
feed-water network, the furnace, the operation of  
the superheater are presented with diagrams and  
photographs. Eleven diagrams.  
Institution : Main Central Power System and Moscow Power System  
Submitted : No date

NEMOV, A. P.

527N/5  
725.221  
.24

Opyt Ekspluatatsii Kashirskoy GES (Operation of the Kashirskaya Gosudarstvennaya Rayonnaya Elektrostantsiya) Pod Obshchey Red. L. A. Yermakova, A. P. Nemova i Ya. M. Ostrovskogo. Moskva, Gosenergoizdat, 1956.  
179 (1) P. Illus., Diagrs., Tables.  
"Literatura": P. 178- (180)

NEMOV, A.P., inzh.; OSTROVSKIY, Ya.M., kand.tekhn.nauk; SAFRAZHEKIAN, inzh.

Technical bases of the development of the Moscow Regional Power  
System Administration (Mosenergo) in the past 40 years. Elek.  
sta. 28 no.11:75-81 N '57.  
(MIRA 10:11)  
(Moscow Province--Electric power)

NEMOV, A.P., inzh.; SHITSMAN, S.Ye., inzh.

Some problems in the operation of thermal electric power plants.  
Teploenergetika ? no.11:3-8 N '60. (MIRA 14:9)

1. Moskovskoye rayonnoye upravleniye energokhozyaystva.  
(Electric power plants)

NEMOV, A.P., inzh.

Kashira and Shatura State Regional Electric Power Plants are the forerunners of the plan of the State Commission for the Electrification of Russia. Teploenergetika 7 no. 12;12-13 D '60.  
(MIRA 14:1)

1. Mosenergo.

(Shatura--Electric power plants)

(Kashira--Electric power plants)

NEMOV, A.P., inzh.

Fiftieth anniversary of the Moscow Electric Utility System. Elek.  
sta. 36 no.11:7-10 N '65.  
(MIRA 18:10)

NEMOV, K.N.; SEMENOV, V.S.; KORNEYEV, S.G.; KHAYKINA, A.Ye.,  
nauchn. red.; POPOV, V.N., tekhn. red.

[Find the logical way] Naiti razumnoe. Tambov, Tambovskoe knizhr.  
izd-vo, 1962. 16 p. (Bibliotechka novatora, no.6)  
(Technological innovations) (MIRA 16:10)

VASIL'YEV, N.N.; NEMOV, L.A., instruktor tekhnicheskogo obucheniya

A "school of progressive experience" in the Ozherelye Railroad Repair  
Shop. Elek. i tepl. tiaga 7 no.4:23 Ap '63. (MIRA 16:5)

1. Ispolnyayushchiy obyazannosti glavnogo inzhenera depo Ozherel'ye  
Moskovskoy dorogi (for Vasil'yev).  
(Ozherelye--Railroads--Repair shops)

NEPOROZHNIY, P.S.; SAVINYKH, A.P.; SAPOZHNIKOV, F.V.; SERDYUKOV, N.P.;  
ACHKASOV, D.I.; BURGSDORF, V.V.; NEMOV, N.P.; SYROMYATNIKOV, I.A.;  
KNYAZEVSKIY, B.A.; ROKOTYAN, S.S.; STEKLOV, V.Yu.; FEDOSEYEV, A.M.;  
GRUDINSKIY, P.S.; KHOMEYAKOV, M.V.; VENIKOV, V.A.; CHERNOBROVOV, N.V.;  
MEL'NIKOV, N.A.; BERSHADSKIY, I.S.

Aleksandr Dmitrievich Romanov, 1905; on his 60th birthday. Elek.  
sta. 36 no.11:94 N '65.  
(MIRA 18:10)

L 29166-66  
ACC NR: AP6013890

SOURCE CODE: UR/0104/65/000/011/0054/0094

AUTHOR: Noporozhniy, P. S.; Savinykh, A. P.; Sapozhnikov, F. V.; Sordyukov, N. P.; Achkazov, D. I.; Burgdorf, V. V.; Nemov, M. P.; Syromyatnikov, I. A.; Knyazovskiy, B. A.; Rokotyan, S. S.; Stekliev, V. Yu.; Fedoseyev, A. M.; Grudinskij, P. S.; Khomyakov, M. V.; Venikov, V. A.; Chernobrovov, N. V.; Mel'nikov, N. A.; Bershadskiy, L. S.

ORG: none

TITLE: Honoring the 60th birthday of Aleksandr Dmitrievich Romanov

SOURCE: Elektricheskiye stantsii, no. 11, 1965, 94

TOPIC TAGS: electric power plant, industrial personnel

ABSTRACT: In July 1965 A. D. Romanov celebrated his 60th birthday and the 35th anniversary of his active life as a major designer, operator, and builder of electric power stations. On his graduation in 1927 from the Moscow College of Engineering, Aleksandr Dmitrievich joined the Mosenergo Moscow Power System where he steadily rose through the ranks until he became Deputy Chief Engineer, while at the same time participating in the design and practical introduction of 500-kV electric transmission lines running from Moscow to Volzhskaya Hydroelectric Power Station and from Kuybyshev to the Urals. Since 1959 A. D. Romanov has been Chief Engineer at the Glavvostokelektrostroy Main Administration for Power Grid Construction in Eastern USSR of the

Cord 1/2

ACC NR: AP6018890

State Production Committee for Energetics and Electrification USSR. Along with his active work, since 1930 A. D. Romanov has been teaching courses in Power Networks and Systems as well as in Power Stations and Substations at the Moscow Correspondence Institute of Energetics and, later, at the All-Union Correspondence Institute of Energetics, and, in this capacity, has trained new cadres of power engineers. In 1957 the title of Assistant Professor was conferred on him and in 1963, the title of Candidate of Technical Sciences. He has published more than 40 scientific and technical articles on power engineering and construction and he is a member of the editorial boards of the periodical anthologies Energeticheskoye Stroitel'stvo (Power Construction) and Energeticheskoye Stroitel'stvo za Rubezhom (Power Construction Abroad). He has been a Party member since 1932 and is the bearer of the Order of Labor Red Banner as well as of various medals. Best wishes for further creative work are extended to him. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 10 / SUBM DATE: none

Card 2/2 (1)

166-66  
ACC NR: AP6018890

SOURCE CODE: UR/0104/65/000/011/0094/0094

AUTHOR: Koporozhniy, P. S.; Savinykh, A. P.; Sapozhnikov, F. V.; Sordynakov, N. P.; Achkinov, D. I.; Burgdorf, V. V.; Nomov, M. P.; Syromyatnikov, I. A.; Knyazevskiy, B. A.; Nokotyan, S. S.; Stoklov, V. Yu.; Fedosoyev, A. M.; Grudinskij, P. S.; Khomyakov, N. V.; Venikov, V. A.; Chernobrovov, N. V.; Mel'nikov, N. A.; Bershadskiy, L. S.

ORG: none

TITLE: Honoring the 60th birthday of Aleksandr Dmitrievich Romanov

SOURCE: Elektricheskiye stantsii, no. 11, 1965, 94

TOPIC TAGS: electric power plant, industrial personnel

ABSTRACT: In July 1965 A. D. Romanov celebrated his 60th birthday and the 35th anniversary of his active life as a major designer, operator, and builder of electric power stations. On his graduation in 1937 from the Moscow College of Engineering, Aleksandr Dmitrievich joined the Mosenergo Moscow Power System where he steadily rose through the ranks until he became Deputy Chief Engineer, while at the same time participating in the design and practical construction of 500-kV electric transmission lines running from Moscow to Vilyuchskaya Hydroelectric Power Station and from Kuybyshev to the Urals. Since 1952 A. D. Romanov has been Chief Engineer at the Glavvostoelektrostroy Main Administration for Power Grid Construction in Eastern USSR of the

Cord 1/2

ACC MM: NY016890

State Production Committee for Energetics and Electrification USSR. Along with his active work, since 1930 A. D. Romanov has been teaching courses in Power Networks and Systems as well as in Power Stations and Substations at the Moscow Correspondence Institute of Energetics and, later, at the All-Union Correspondence Institute of Energetics, and, in this capacity, has trained new cadres of power engineers. In 1957 the title of Assistant Professor was conferred on him and in 1963, the title of Candidate of Technical Sciences. He has published more than 40 scientific and technical articles on power engineering and construction and he is a member of the editorial boards of the periodical anthologies Energeticheskoye Stroitel'stvo (Power Construction) and Energeticheskoye Stroitel'stvo za Rubezhom (Power Construction Abroad). He has been a Party member since 1932 and is the bearer of the Order of Labor Red Banner as well as of various medals. Best wishes for further creative work are extended to him. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 10 / SUBM DATE: none

Card 2/2 10

NEMOV, Nikolay Vasil'yevich

[Economy and thrift in agriculture] *Ekonomika i berezhlivost' v sel'skom khozisistve.* [Moskva] Moskovskii rabochii, 1955. 111 p.  
(Agriculture—Economic aspects) (MIRA 10:2)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001136520020-1

NEMOV, V. G., Cand Agr Sci -- (diss) "Controlled raising of grape varieties for the preparation of champaigne wine materials in the Ukrainian SSR." Odessa, 1960. 16 pp; (Ministry of Agriculture Ukrainian SSR, Odessa Agricultural Inst); 200 copies; price not given; (KL, 17-60, 164)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001136520020-1"

L 48825

ACCESSION NR. AF5007533

0292/65/000/003/0331/0033

ACCESSION NR. AP5007533  
AUTHOR: Smagin, N. N. (Engineer); Namikov, K. N. (Candidate of physico-  
mathematical sciences); Nemov, V. V. (Engineer)  
TITLE: Contacts of circuit-breakers

**TITLE:** Investigation  
during short-cultivation

SOURCE: Mikrotekhnika, no. 3, 1965, p. 1-13

SOURCE: Elektrotechnik, no. 1, 1962  
TOPIC TAGS: circuit breaker, electrodynamic force, contact rebound

**ABSTRACT:** Tests are described for determining the maximum values and variations of the compensator force, the electrodynamic force, and the compensator-caused movement of movable contacts in a three-pole circuit-breaker model. A 200-amp circuit-breaker with a contact-spring pressure of 6-8 kg and a KhlMZ contact-rebound compensator was tested. A maximum compensator force at the lever end of 69-93 kg was measured with maximum

Card 1/2

L 48826-65  
ACCESSION NO. AP5007533

currents of 34–40 ka and a single-phase short-circuit. This force reached 130–140 kg with a three-phase 30–36 ka short-circuit. The maximum was reached by the end of the first half-wave; after the aperiodic component of the short-circuit current had died away, the end-lever force oscillated with a double frequency. Construction and location of the tensosensors used in the tests are briefly described. Orig. art. has: 6 figures, 3 formulas, and 1 table.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: EE

NO REF. NOV: 002

OTHER: 000

Card 2/2

<u>L 58956-45</u>	<u>MT(a)/ENP(1)/ENP(b)/ENP(t)</u>	<u>JJ</u>			
<u>ACCESSION NR.</u>	<u>AR 012742</u>				
<u>SOURCE:</u>	<u>Ref. zh. Tekhnologiya mashinostroyeniya. Sverdlovsk, tom, Abs. 1B427. 17</u>				
<u>AUTHORS:</u>	<u>Nemova, L. I., Slotina, E. I.</u>				
<u>TITLE:</u>	<u>Technological process of direct acid copper-plating of steel</u>				
<u>CITED SOURCE:</u>	<u>Vses. n.-i. in-ta technol. elektromashino-i apparatostr., vyp. 2, 1964, 43-54</u>				
<u>TOPIC TAGS:</u>	<u>plating, copper cladding, steel, electroplating, electroplating solution</u>				
<u>TRANSLATION:</u>	<u>Research and development of a technological process of direct acid copper-plating of steel without preliminary copper-plating in cyanic electrolytes were carried out. As a result of these investigations an electrolyte was developed which allows direct galvanic plating of copper on steel with good adhesion to the base. The technological method includes electrochemical degreasing in a solution of composition (in g/liter): sodium hydroxide - 30, sodium carbonate</u>				
<u>Card 1/2</u>					

S 58956-65

ACCESSION NO: A95012712

- 30, sodium phosphate - 40, and sodium silicate - 5 at a temperature of 70-90°, and a current density of 7-10 amp/dm<sup>2</sup> for 10-12 min; hot washing at 60-90° for 0.5-1 min; cold washing at room temperature for 0.5-1 min; etching in a mixture of sulfuric acid (25%) and thiourea 4-7 g/liter; cold washing at room temperature for 0.5-1 min; copper-plating in an electrolyte of composition (in g/liter): copper sulfate .. 200, ammonium sulfate - 10, and surface-active compounds DS-604 KI-1; washing in running water; and drying.

Curj MC  
Curj 2/2

MEMOVA, Ye.Ye.

Roentgenkymographic method in the study of external respiration  
in athletes. Probl.vrach.kontr. no.3:259-273 '55.

(ATHLETES) (LUNGS--RADIOGRAPHY) (RESPIRATION) (MIRA 12:9)

NEMOVA, Ye.Ye.; KUKOLEVSKAYA, Ye.V.; KUZ'MINA, V.N.

Study of the training level of short-distance runners based on  
medical examinations. Probl.vrach.kontr. no.4:38-54 '58.  
(MIRA 12:9)  
(RUNNING--HYGIENIC ASPECTS)

KUKOL'YUSKAYA, Ye.V.; NEMOVA, Ye.Ye.

Study of the training level of basketball players based on  
medical examinations. Probl.vrach.kontr. no.4:71-8t '58.  
(MIRA 12:2)  
(BASKETBALL--HYGIENIC ASPECTS)

NEMOVA, Ye. Ye.

Results of an overall study of respiration in athletes under  
varying training conditions. Probl.vrach.kontr. no.4:123-139  
'58.

(ATHLETES)

(RESPIRATION)

(MIR 12:9)

KUKOLEVSKAYA, Ye.V.; NEMOVA, Ye.Ye.

Planning the transitional period in a system for the year-round  
training of a sprinter. Probl. vrach kontr. no.5:95-103 '60.  
(MIRA 14:3)  
(SPRINTING)

NEMOY, A.S.; SHABAD, A.L.

Tumors of the vesical diverticulum. Urologia no.3:51-54 '62.

1. Iz urologicheskoy kliniki (zav. - zasluzhennyy deyatel' nauki  
prof. A.P. Frumkin) Tsentral'nogo instituta usovershenstvovaniya  
vrachey na baze bol'nitsy imeni S.P. Botkina.  
(BLADDER--TUMORS)

PETROVA, G.P.; NEMOYTIN, M.A.

Experience with the use of the method of emission spectrum analysis for the determination of relative magnesium concentrations in bacterial cultures. Biofizika 8 no.6:7:1-735 '63.

(MIRA 17:7)

I. Voyennye-meditsinskaya ordina Lenina akademiya imeni S.M. Kirova.

NEMPOV, S A.

ACCESSION NR: AP3008085

S/0089/63/015/003/0266/0267

AUTHOR: none

TITLE: Seminar on refractory metals, compounds, and alloys [Kiev, April 1963]

SOURCE: Atomnaya energiya, v. 15, no. 3, 1963, 266-267

TOPIC TAGS: refractory metal, refractory compound, refractory alloy, electron structure, crystal structure, electron beam welding, physical property, vanadium, niobium, molybdenum, single crystal growth, tungsten, rhenium silicide, nonmagnetic zirconium base alloy, tantalum, nonmetallic element diffusion, heat conductivity, electric conductivity, thermal diffusivity

ABSTRACT: In April 1963, a seminar on the extraction, physical properties, and electron structure of refractory metals was held in Kiev under the sponsorship of the Institute of Powder Metallurgy and Special Alloys, Academy of Sciences, Ukrainian SSR. Approximately 300 representatives of scientific research institutes attended the

Card 1/1

ACCESSION NR: AP3008085

S. A. Nemponov. Specific features of electron structure and certain properties of 1st, 2nd., and 3rd large-period refractory metals.

G. V. Samsonov, V. N. Paderno. Some laws governing melting temperatures and other physical properties of transition metals.

R. G. Avarbe. Thermodynamic stability of monocarbides of transition metals of subgroups 4, 5, and 6 and periodicity of the change in some of their properties.

V. K. Grigorovich. The relationship between NaCl- and NiAl-type crystal structures of transition metals and their electron structure.

N. M. Yakobi, V. A. Sinel'nikova, and others. Obtaining high-purity vanadium and niobium by electron-beam melting.

N. A. Brilliantov, V. N. Kachinskiy, L. S. Starostina. The growing of molybdenum and tungsten single crystals by zone melting and determination of the Hall effect.

Card 3711<sub>2</sub>

## PAGE I BOOK EXPLORATION

REV/2505

3(5) Аналіза наскрізний №№. Бювет по інженерно-геодезичній промисловості УРСІДА

Професійне пісочник Організації №№. т. 2: Несметаллическое пісочникове полічепоєве (Natural Resources of the Georgian Soviet Socialist Republic). Mineralogical and Petrographic (Natural Resources of the Georgian Soviet Socialist Republic). Mineral Deposits. Ind-rov. All. Geologicheskaya i Mineralogicheskaya (Geological and Mineralogical) Nauka i Tekhnika, Moscow, 1959. 319 p. Blank slip inserted. 5,500 copies printed.

Mr. P.M. Tavadze, Corresponding Member, Organizatsiya nausk. Akademii ukrainy, Tech. Ed.

Sciences, Ed. of Publishing House, K.L. Peidot (new); Tech. Ed., M.D.

A.P. Guseva, Editorial Board, R.I. Aghadez, Sh. N. Archakashvili, M.D.

Vachnadze, G.D. Gvelesiani, B.I. Guramishvili, A.I. Dzhanashvili, L.J. Mikadze,

G.S. Dotsenko, S.V. Darchishvili, M.M. Metakhevi, I.J. Mikadze,

N.M. Rabinashvili, A.A. Tsvetashvili, G.V. Tsitsishvili,

and P.G. Shengelia.

PROMISE: This book is intended for economic geologists and mineralo-

gists.

COMMENT: This collection of articles describes the nonmetallic mineral deposits of the Organizatsiya nausk. SSRR and the extent to which they have been exploited. Individual articles discuss the importance of talc, andesite, and other minerals due to the

chemical industry; of barite, gypsum, and bentonite clays to the petroleum industry; and of marble, slate, and limestone to the construction industry. A map depicting the major nonmetallic mineral deposits is included with the work. No personalities are mentioned.

REFERENCES: References accompany each article.

239  
239  
267  
267  
267  
267  
269  
270  
771  
771  
280  
284  
284  
280  
285  
Card 10/13

NEMSADEZ, Grigoriy Pimenovich

[Californian magician] [Kaliforniiskii volsneonik.  
Tbilisi, Gos.izd-vo "Saochota Sakartvelo"] 1963. 26 p.  
(MIKA 17:1)  
[In Georgian]

SALAMOVA, S.V., polkovnik med.sluzhby; NEMSAZHE, K.M., polkovnik med.sluzhby

Portable oxygen unit. Voen.-med.shtur. no.2:88 P '60. (MIRA 13:5)

(OXYGEN therapy)

BETANELI, I.D., kandidat tekhnicheskikh nauk; MONTSELIDZE, M.A., inzhener;  
KOMPANIONI, Zh.I., inzhener; CHOGOBADZE, G.I., inzhener; MGEBRISHVILI, I.M.,  
inzhener; ~~NESADZE, M.I.~~, inzhener.

Use of belt conveyers for transporting concrete mixtures. Gidr.stroi. 22  
(MLRA 6:8)  
no.8:1-5 Ag '53.  
(Concrete--Transportation)

NEMSADZE, M. I.

BETAKHILI, I.D., kandidat tekhnicheskikh nauk; KOMPANIIONI, Zh.I.,  
inshener; MGERISHVILI, I.M., inshener; MONTSHELIDZE, M.A., in-  
shener; NEMSADZE, M.I., inshener; CHOGOVADZE, G.I., inshener.

Standard prefabricated concrete plant with two S-158 concrete  
mixer. Elek. sta. 25 no.6:48-49 Je '54. (MLRA 7:7)  
(Concrete) (Mixing machinery)

SHESTERINA, M.V., kand. med. nauk; NEMSADZE, M.N.

Comparative evaluation of the examination of lavage waters of  
the bronchi and the stomach for Mycobacterium tuberculosis.  
Probl. tuberk. 41 no.4:31-35 '63 (MIRA 17:2)

1. Iz bronkhologicheskogo otdeleniya (rukoveditel' -  
prof. A.N.Voznesenskiy) i iz kliniko-diagnosticheskoy labo-  
ratorii (rukoveditel' - kand. med. nauk T.N.Yashchenko) Mos-  
kovskogo nauchno-issledovatel'skogo instituta tuberkuleza  
(dir. - kand. med. nauk T.P.Mochalova, zamestitel' direktora  
(dir. - kand. med. nauk D.D. Aseyev) Ministerstva zdravo-  
okhraneniya RSFSR.

YASHCHENKO, T.N., kand.med.nauk; NEMSADZE, M.N.; SKRYABINA, L.Ye.

Diagnostic methods and bacillary excretion in tuberculous patients  
under antibacterial therapy. Probl. tub. 42 no.12:49-55 '64.  
(MIRA 18:8)

1. Nauchno-issledovatel'skiy institut tuberkuleza (direktor -  
kand.med.nauk T.P.Mochalova; zam. direktora po nauchnoy chasti  
prof. D.D.Aseyev) Ministerstva zdravookhraneniya RSFSR, Moskva.

NEMSADZE, T.A.

Velocity distribution in a two-phase turbulent flow. Trudy Gruz  
NIIGIM no.21:225-232 '60. (MIRA 16:1)  
(Hydrology)

LYUBOSHITS, N.A. (Moskva I-337, B. Mytishchinskaya ul. d.20/11, kv.3);  
NEMSAZEE T.R.; ALYABIEV, V.N.

Traumatic hip dislocation in children. Ortop., travm. i protez.  
25 no. 5:9-13 Mv '64. (MIRA 18:4)

1. Iz TSentral'nogo instituta travmatologii i ortopedii (dir. -  
chlen-korrespondent AMN SSSR prof. M.V. Volkov) i Detskoy  
gorodskoy bol'niцы №.20 imeni Timiryazeva (nauchnyy rukovoditel' -  
N.G. Dam'ye).

LYUBOSHITS, N.A.; NEMZADZE, V.P.

Traumatic dislocation of both hips in association with a fracture of one hip in a 13-year-old child. Khirurgia 40 no. 4 p146-148  
My '64. (MIRA 18:2)

1. Klinika detskoy travmatologii (zav. - kand. med. nauk N.I. Sam'ye,  
Central'nogo instituta travmatologii i ortopedii (dir.- prof.  
N.V. Volkov), 10 detskaya gornozavodskaya bol'ница No.26 imeni  
Timiryazeva (p1a nyy vrac. S.I. Yesayana), Moskva.

S/058/62/000/005/085/136  
K057/RM:

AUTHORS: Gvilava, N. M., Nemsadze, Ye. K., Chigogidze, Z. N.

TITLE: The temperature dependence of the electric conductivity of  $\text{MgO}_3$  single crystals

PERIODICAL: Referativnyy zhurnal, Fizika, no. 6, 1962, 32, abstract 6F265  
("Tr. Tbilissk. un-ta", 1960, v. 86, 459 - 464)

TEXT: The dependence of the electric conductivity  $\sigma$  of  $\text{MgO}_3$  single crystals was investigated in the temperature range from  $-50$  to  $+250^\circ\text{C}$  considering the effect of thermal treatment. Two regions of linear dependence of  $\log \sigma$  on  $1/T$  can be observed:  $220$  -  $280^\circ\text{K}$  with activation energy  $\Delta E \approx 0.47$  ev and  $380$  -  $430^\circ\text{K}$  with  $\Delta E = 0.87$  -  $1.12$  ev. The reversible dependence of  $\sigma$  on  $T$  is observed only up to  $80^\circ\text{C}$ . Above  $80^\circ\text{C}$ ,  $\sigma$  increases irreversibly without a change of  $\Delta E$ . This is explained by the formation of oxygen vacancies in thermal treatment, which are capture centers for electrons.

P. Konorov

[Abstracter's note: Complete translation]

Card 1/1

L-24136-5	REF ID: A88188	AMR(b)/SMP(c)	IJP(c)	JD	S/0251/61/036/003/0541/0446	72 24 P
ACCESSION NUMBER	U5003269					
AUTHORS:	Chegolidze, Z. N.; Nevedzina, Ye. K.; Khvedelidze, L. V.; Matveyenko, A. V.					
TITLE:	The nature of thermal acceptor centers in indium antimonide					
SOURCE:	AN GRUSSR. Soobshcheniya, v. 36, no. 3, 1964, 541-546.					
TOPIC/TITLE:	Indium antimonide; heat treatment; semiconductor property					
ABSTRACT:	The authors studied the effect of the external environment on changes in electrical properties of InSb during heat treatment. Investigations were made on monocrystalline specimens of n-type InSb ( $1.2 \times 0.3 \times 0.15$ cm). Measurements on conductivity and the Hall effect were made by the compensation method with direct current. Specimens were annealed in a vacuum, in argon, and in antimony vapor. Annealing temperature was 450°. Specimens were held at this temperature for 25-50 hours, depending on atmosphere, and were then slowly cooled to room temperature over a period of 50 hours. The temperature dependence of conductivity and Hall effect is illustrated in Fig. 1-3 on the Enclosures. It is apparent that the changes caused by annealing appear in the impurity band. Despite the type of atmosphere, all specimens showed a change from n- to p-type conductivity.					
Card #	/5					

E-24 PAGE  
ACCESSION NO. A-100-26

Compound I was found to have some catalytic properties for Si-C bond formation, as shown by the following experiments:

ASSOCIATION THE BALTIC UNIVERSITY OF TALLINN UNIVERSITY (Tallin State University)

SUBMITTED BY: LEADERSHIP TEAM  
SEARCHED: 03  
SERIAL NO.: 00000000000000000000000000000000  
SUB CODE: SS

NO RET. SOV & OCT OTHERS OCT

For more information about the study, please contact Dr. Michael J. Hwang at (319) 356-4550 or via email at [mhwang@uiowa.edu](mailto:mhwang@uiowa.edu).

10. The following table shows the number of hours worked by each employee.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001136520020-1"

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001136520020-1

L-2/136-65

ACCESSION NO. AP-003269

D  
ENCLOSURE 00

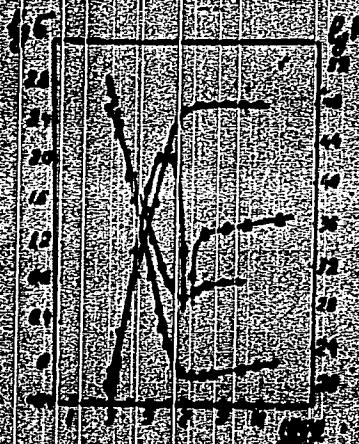


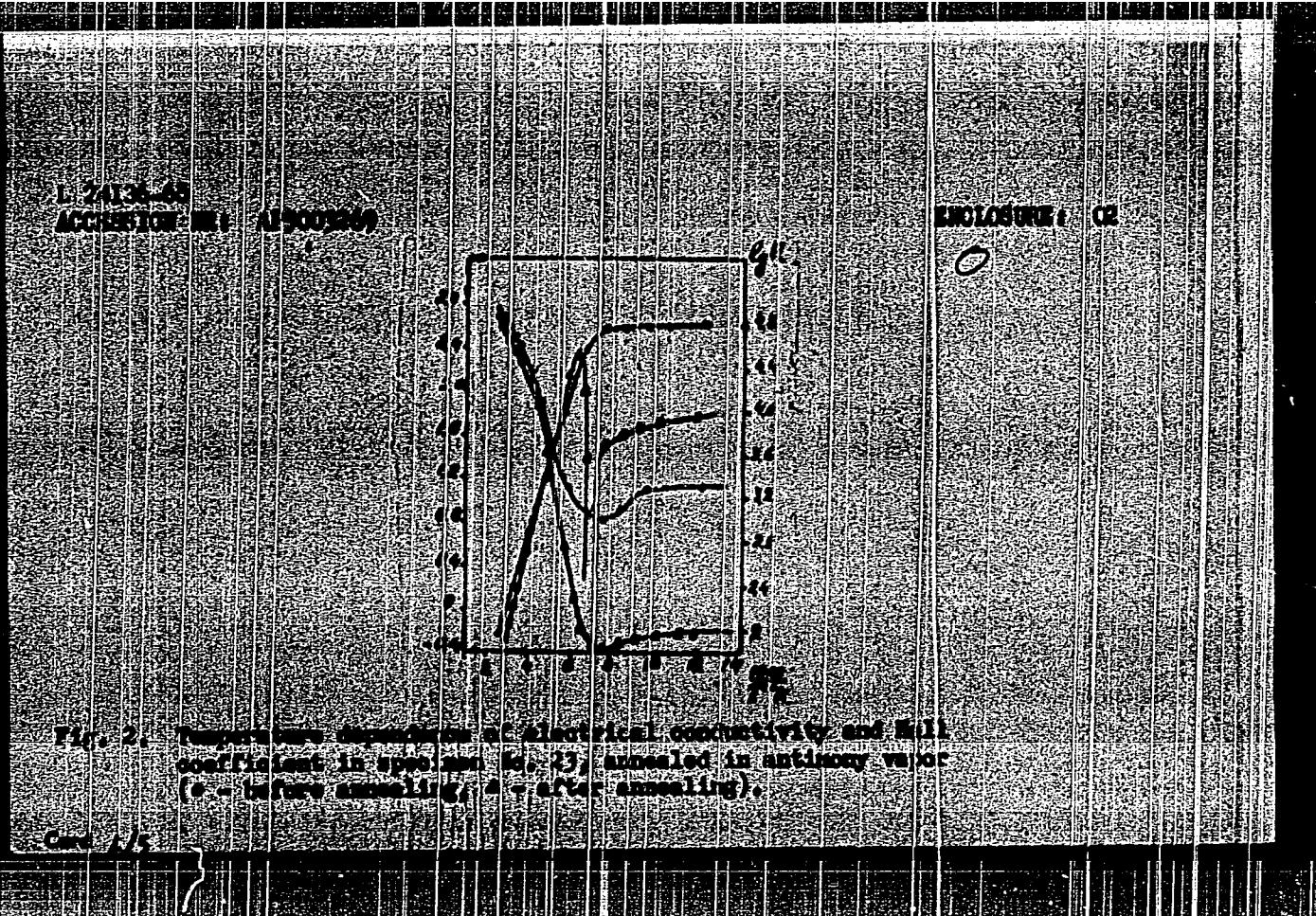
Fig. L-2/136-65  
Graph showing the relationship between time and weight gain or loss.  
The graph shows two distinct curves, both starting at approximately 80 units on the Y-axis (Time) and ending at approximately 100 units on the X-axis (Weight).  
Curve 1 starts at (0, 80) and ends at (20, 100).  
Curve 2 starts at (0, 60) and ends at (20, 40).  
The curves represent a significant increase in weight over time, with Curve 1 showing a steeper increase than Curve 2.

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001136520020-1"

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001136520020-1

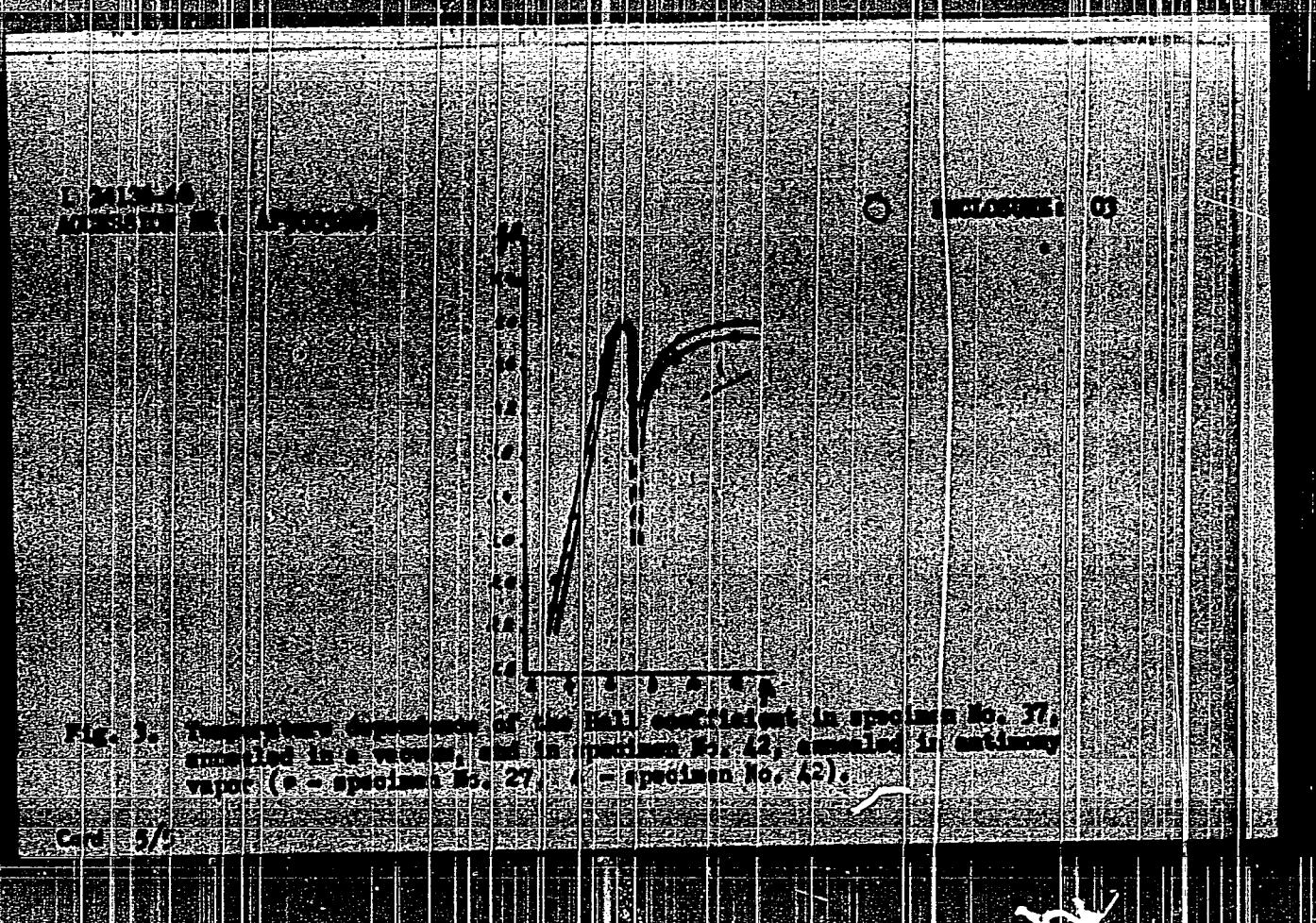


APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001136520020-1"

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001136520020-1



APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001136520020-1"

MEMSADZE, Z.

TSkhaltubo, a wonderful health resort. Okhr. truda i sots. strakh.  
3 no.8:25-29 Ag '60. (4 IRA 13:9)

1. Machal'nik TSkhaltubskogo kurortnogo upravleniya profsoyusov.  
(TSkhaltubo--Health resorts, watering places, etc.)

NEMSEVICH, A.

Ways to economic efficiency. Zhil.-kom. khoz. 12 no. 3:12-13  
Mr '62. (MIRA 15:10)

1. Glavnnyy bukhgalter Zhiliashchnogo upravleniya Moskovskogo  
gorodskogo soveta deputatov trudyashchikhsya.

(Moscow--Housing management)

NEMSHEVICH, A.

Without subsidies. Zhil.-komm. khoz. 13 no.2:13-14. '63. (MLA 16:3)

1. Glavnyy bukhgalter Zhilishchnogo upravleniya Moskovskogo gorodskogo  
soveta deputatov trudyashchikhsya.  
(Moscow-Housing management)

NEMSHILOV, S.P.

Immunological effectiveness of immunologically related artificial vaccines. Nauch. trudy Mat. i sots. inst. 14:451-59. Tashkent, 1971.  
I. Kur. epizooticheskii (za... - v. 2). Tashkent, 1971. Tashkent, 1971.  
tsinskogo instituta.

NEVSHILOVA, Nina Aleksandrovna

1961

1964

MICROBIOLOGY

DECEASED

TATADEZ, L.G.; NEMSITSVERIDZE, A.L.

Mechanised shovel for unloading loose materials from railroad cars.  
Rats. i isezr. predl. v strel. no. 117:32-34 '55. (MLRA 9:7)  
(Loading and unloading)

NEESITSVERIDZE, Sh.2.

Treatment of gangrene of the sigmoid. Trudy Tbil. GIDOV 6:4:59-  
467 '62. (MIRA 16:2)  
(GANGRENE) (COLON (ANATOMY)--SURGERY)

NEMTSVERIDZE, Sh.Z.

Treatment of torsion of the sigmoid by tetorsion. Truly Tbil.  
GIDUV 6:469-474 '62. (MIRA 16:2)  
(COLON (ANATOMY)—SURGERY)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001136520020-1

NEMISITSVERIDZE, Sh.

Performance of L.I. Grelka, 1st Lt., Trasy M.R., OKSP.  
klin. khir. i genat. AN Gruz. R. 18'04'256 '90.  
(MIRA 12.7)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001136520020-1"

NEMSITSVERIDZE, Shota Zosimovich

[Obstruction caused by a volvulus of the sigmoid] [Nepro-khodimost' ot zavorota sigmovidnoi kishki. Tbilisi, Metsniereba] 1965. 186 p. [In Georgian] (MIRA 18:8)

KOLAROV, St.; NEMSKI, B.

Rheumatic pulmonary inflammation. Suvar. med. 13 no. 7:3-8 '62.

(PNEUMONIA) (RHEUMATIC FEVER)

NEMTEANU, A.

Certain aspects of the development of global standards based on typical norms. p. 49.  
METALURGIA SI CONSTRUCTIA DE MASINI. (Ministerul Industriei Metalurgice si Constructilor  
de Masini si Asociatia Stiintifica a Inginerilor si Tehnicilor) Bucuresti.  
Vol. 8, no. 4, Apr. 1956.

SOURCE: EAST European Acquisitions List, (EEAL), Library of Congress,  
Vol. 5, No. 11, November, 1956.

~~SECRET~~  
Final practice of the interpretation of the following sentence.

I. D. (et al) and G. (et al) and I. (et al), etc., etc., etc.,

...etc., I think it was supposed to mean I. (et al), etc., etc.,

RUMANIA/Farm Animals - Horses.

Q-2

Abs Jour : Ref Zhur - Biol., No 1, 1958, 2550

Author : I. Marinescu, C. Domilescu, D. Rusu, St. Nemteanu,  
Inst Title : C. Draghici, C. Moldoveanu, N. Popescu

Orig Pub : The Influence of Corn Feed on Blood Constants and the  
Organism of Horses.  
: Probl. zootechn. 1957, No 1, 27-39 (Romanian. Resume Rus.  
and French).

Abstract : A control group of horses (2 horses) received during 60  
days a ration which consisted of five kilograms of hay,  
4.75 kilograms of oats, 0.5 kilograms of fodder-briquets,  
3 kilograms of straw, and 30 grams of salt. In the se-  
cond group (2 horses) during a week the oats were replaced  
by crushed corn kernels. In the third group (4 horses)  
oats were replaced by corn kernels. The corn feed did not

Card 1/2

RUMANIA/Farm Animals - Horses.

Abs Jour : Ref Zhur - Biol., No 1, 1958, 2550

affect the appetite of horses and brought no changes in the blood content of the animals (hemoglobin, erythrocytes, leukocytes, Reaction of erythrocyte sedimentation etc.).

Card 2/2

RUMANIA/Farm Animals. Horses.

1-2

Abs Jour : Ref Zhur - Biol., No 7, 1958, 30932

Author : Marinescu I., Varachiu N., Lomilescu C., ~~Mercianu G.~~, Serbu Eugenia, Praghici C., Corneci I., Moldoveanu C.

Inst Title : -  
The Influence of Feeding with the Grain of Indian Corn upon the Organism of Horses and on Their Blood Indexes During Work.  
(Vliyanie kormleniya zernom kukuruzy na organizm koni i na pokazateli krovi ikh v rabote).

Orig Pub : Probl. zootehn., 1957, № 4, 11-25.

Abstract : The experiments, accompanied by clinical observations and systematic blood analyses, demonstrated the possibility of the substitution of Indian corn for oats in the rations of draft horses.

Card 1/1

- 27 -

2  
RODANIA

MUNTIU, N., MD; COROI-ALBU, Sanda, Pharmacist; NEAMTEANU, St., "D.

Bucharest, Farmacia, No 6, Jun 63, pp 371-374

"Research Regarding the Blood Level of a New Synthetic Penicillin Administered by Mouth, Alpha-hydroxypropylpenicillin (PA 243)."